

WHAT IS CLAIMED IS:

1. A process for preparing a low color, PVB sheet comprising the steps: (I) admixing polyvinyl alcohol, butyraldehyde, an acid or mixture of acids, water, and a surfactant (II) stabilizing the mixture obtained in step (I) by (a) raising the pH of the mixture to at least pH 10 (b) isolating the resin by draining the liquid, (c) washing the resin with neutral pH water; (III) plasticizing the PVB resin composition with from about 30 to about 50 pph of plasticizer based on the dry weight of the PVB resin; (IV) optionally mixing (a) a PVB bleaching compound and/or (b) an antioxidant and a UV light stabilizer with the PVB resin composition; and (V) extruding the PVB resin composition at a temperature of from about 175°C to about 225°C to obtain a PVB sheet having a glass transition temperature (T_g) of greater than about 32°C and a YID of less than about 12.
2. The process of Claim 1 wherein: (a) the resin composition is plasticized with from about 30 to about 50 pph plasticizer; (b) the resin composition includes an antioxidant and a UV light stabilizer.
3. The process of Claim 2 wherein the antioxidant is a diphenolic compound.
4. The process of Claim 3 wherein the resin composition is extruded at a temperature of from about 205°C to about 220°C.
5. The process of Claim 4 wherein the resin composition is extruded at a temperature of from about 210°C to about 215°C.

6. The process of Claim 2 wherein the surfactant is a dialkylsulfosuccinate.

7. The process of Claim 6 wherein the surfactant
5 is DOSS.

8. The process of Claim 2 wherein the resin composition includes a PVB bleaching compound.

9. The process of Claim 8 wherein the bleaching
10 compound is an organic bisulfite, an inorganic bisulfite, or a dialkylsulfosuccinate.

10. The process of Claim 9 wherein the bleaching
15 compound is DOSS.

11. The process of Claim 10 wherein the PVB is plasticized using a wet process.

12. The process of Claim 10 wherein the PVB is
20 plasticized using a dry process.

13. An PVB sheet obtained by the process of any
of Claims 1-12.

14. A plasticized PVB sheet composition
consisting essentially of: polyvinylbutyral having a
hydroxyl (OH) number of from about 15 to about 25; a
plasticizer or plasticizer mixture present in an amount
25 of from about 30 pph to about 50 pph, based on the dry
weight of the PVB resin; a surfactant; and optionally
including either (i) a PVB bleaching compound, or (ii)
an antioxidant and an ultraviolet (UV) light
stabilizer, or (iii) both (i) and (ii), wherein the
35 sheet has a yellowness index (YID) color of less than
12.

15. The composition of Claim 14 wherein the plasticizer is 3GO.

5 16. The composition of Claim 15 wherein the plasticizer is present in an amount of from about 30 to about 45 pph, by weight, based on the dry weight of the PVB resin.

10 17. The composition of Claim 16 wherein the plasticizer is present in an amount of from about 35 to about 45 pph.

15 18. The composition of Claim 17 wherein the PVB includes a surfactant, a bleaching compound, an antioxidant, and a UV light stabilizer.

20 19. The composition of Claim 18 wherein the surfactant and the bleaching compound are the same compound.

20 20. The composition of Claim 19 wherein the surfactant is DOSS.

25 21. The composition of Claim 20 wherein the antioxidant is a bis-phenolic compound.

30 22. The composition of Claim 21 wherein the antioxidant is 2,2'-methylenebis(6-t-butyl-4-methylphenol).

23. A laminate article comprising at least one layer of the PVB composition of Claim 14.